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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/140,752	08/25/1998	CHANDRAKANT BHAILALBHAI PATEL	A7256	9089

7590 06/13/2005

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 20037

EXAMINER	
KOSTAK, VICTOR R	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/140,752	PATEL ET AL.	
	Examiner	Art Unit	
	Victor R. Kostak	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-121* is/are pending in the application.

4a) Of the above claim(s) *69-121* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's arguments filed on 01/24/05 have been fully considered but they are not persuasive. The previous rejection based on 112 1st paragraph accordingly stands. Applicant's arguments are addressed as follows.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23-68 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, as explained in the last Office action. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is first noted that applicant's removal of the term "satellite" from the independent claims is not an insignificant matter. One of the distinct differences between applicant and Stewart is in the fact that applicant does not communicate through satellite whereas Stewart does. This evident in their respective systems by the fact that applicant uses VSB decoding, whereas Stewart uses QPSK slicing (and subsequent decoding) to accommodate satellite broadcast signals, QPSK being typically used in satellite communication.

Addressing applicant's argument that his decoder pair (with other elements) constitutes an adaptive decoder, the examiner disagrees. Applicant argues that selecting between coding formats (in response to a presence detection signal) qualifies as an adaptive decoding procedure, and further relies on a dictionary definition of "*adapt.*"

However, and as pointed out in the last Office action, applicant's disclosure identifies two distinct elements 37 and 38 specified as decoders, clearly neither of which is adaptive. The decoding is done, and "selective" processing is done *subsequent to* the decoding (noting applicant's Fig. 2 and detector signal 34). Applicant's decoding *network* may include other components associated with the two dedicated decoders, but he only discloses two decoders, neither of which is adaptive (the Reed-Solomon decoder notwithstanding, also used in Stewart for the subsequent specific processing). This is not inconsistent with applicant arguing an adaptive decoding *"procedure"* rather than arguing a specific adaptive (singular) *decoder.*

Applicant's additional argument that his operation is similar to that of Stewart's does not dismiss the possibility – and in this case the fact – that their systems are patentably distinct. That Stewart discloses a decoding network comprising block 12 does not dismiss the fact that there are elements and arrangements that operate in a different manner (and further that Stewart accommodates satellite signals using QPSK whereas applicant does not). Stewart in fact describes his demodulation and decoding networks as *both* being adaptive (text to which applicant referred). Applicant and Stewart may have common elements (e.g. deinterleaving, Reed-Solomon, derandomizing/descrambling components) but Stewart has a actual adaptive decoder in element 50. The patentable distinctness is finally evident by the fact that Stewart can account for his system by his claims whereas applicant cannot.

Applicants have two separate decoders respectively dedicated to VSB and QAM formats. There is no adaptability of either decoder. Applicants select between their two decoders because they both perform specifically different decoding processes. Stewart, on the other hand, has an

adaptive decoder 50 as part of overall decoder 12. Applicant does not even disclose Viterbi decoding, which is what decoder 50 of Stewart carries out.

Regarding applicant's argument that the inclusion of differential decoding is a matter of course when QAM processing is involved (relying on MPEP §2163.02), the examiner disagrees.

Applicants are directed to MPEP 2163.07(a) that states *"To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is* ***necessarily*** *present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.* ***Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient."*** Applicants refer to column 5 lines 23-30 in Stewart for support (in a previous communication), but Stewart there states that differential encoding/decoding is "*a known technique*", which is not the same as being necessarily or implicitly fully inclusive to QAM processing. Applicant's explanation that carrier recovery inherently suffers from phase ambiguity (allegedly known at the time of filing) and accordingly overcome by differential coding/decoding cannot be considered inherent. Applicant's reference to a statement from a textbook does not go beyond possibility or probability of what Stewart says regarding such. Applicant's statement that one of ordinary skill in the art "would have" utilized for his QAM signals is supposition.

3. Regarding the first of three other matters, the examiner's interpretation of applicants' *"**means for** processing the data ... "* recited in some claims) under sixth paragraph of 35 USC 112 remains as that specified in the last Office action (repeated herein to cover all issues).

Regarding the second matter, the selection of different code rates is in fact a patentable distinction since that is a key feature of Stewart's adaptive decoder, which applicant does not incorporate (applicant does not disclose Viterbi decoding), contrary to applicant stating otherwise. Applicant's citing of another patent also including such in satellite does not mean every system incorporates such code rate selection. And again, applicant does not disclose satellite communication.

As for the third matter, applicant again argues what is optional rather than what is inherent (or "predictable") and therefore by admission does not disclose in, or suggest by, his original disclosure. His system does not disclose or suggest bypassing an *adaptive* decoder. And referring to what may be a predictable feature does not qualify as an inherent feature (assuming that it is predictable). It is further pointed out that Stewart can bypass element 50 – his adaptive decoder. Applicant relates Stewart's QPSK and QAM processing whereas he processes QAM and VSB data. This is not what involves the bypassing of *adaptive* decoding.

4. Claims 23-68 remain allowable over the prior art.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is (571) 272-7348. The examiner can normally be reached on Monday - Friday from 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this final action should be mailed to:

Box AF
Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 308-HELP.

Victor R. Kostak
Primary Examiner
Art Unit 2614

VRK